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FMCSA-01-11060-20

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✓ Re: Docket No. FMCSA-2001-11060; Certification of Safety Auditors, Safety Investigators, and Safety Inspectors, Interim Final Rule; Request for Comments, 67 Fed. Reg. 12,776 (March 19, 2002)

Re: Docket No. NHTSA-02-11592; Notice 1, Record Keeping and Record Retention, Notice of Proposed Rule Making (NPRM), 67 Fed. Reg. 12,800 (March 19, 2002)

Re: Docket No. NHTSA-02-11593; Notice 1, Importation of Commercial Motor Vehicles, Notice of Proposed Rule Making (NPRM), 67 Fed. Reg. 12,806 (March 19, 2002)

Dear Sir or Madam:

This letter is intended to transmit our expert opinions on two issues that are of concern to our clients. I understand that our background and experience are detailed elsewhere in the record.

The first issue is whether or not the FMCSA's EA analyzes the feasibility of examining Mexican domiciled trucks at border crossings in order to determine their compliance with U.S. emissions regulations at the time of manufacture. While the EA considers the issue of determining compliance of Mexican domiciled vehicles with U.S. safety requirements in detail, it does not, in our opinion, consider in anyway the issue of determining compliance of Mexican domiciled vehicles with U.S. emission regulations. Clearly, this issue should have been thoroughly addressed in the EA before a Finding of No Significant Impact was made.

The United States Environmental Protection Agency has required that new heavy-duty Diesel engines be certified to specific exhaust emission standards for more than 25 years. These standards have become increasingly stringent over time. As a result, engines produced in different model-years may have been certified to different emission standards. It is technically possible to identify heavy-duty Diesel truck engines that have been certified to U.S. standards via labels that are affixed to the engines (rather than the vehicles in which the engines are installed) pursuant to EPA regulations. The current labeling regulations are found at §86.092-35 of Title 40, Code of Federal Regulations and subsequent modifications to that section. The labels are placed on the engines rather than on the vehicles themselves (as is the case with lighter vehicles) because, in general,

engines are sold by their manufacturers to separate truck builders who then install engines, sometimes from several different manufacturers, into the truck cabs they produce.

To the extent that Mexican domiciled vehicles were originally produced and sold in the U.S., it would be possible identify those vehicles if each and every truck was checked by an inspector each time it crossed the border. This inspector would need access to the engine of the truck and verify that the U.S. EPA emissions label was present.

For Mexican-domiciled trucks that were originally produced for sale in Mexico, rather than the United States, the issue of verifying is much more complicated. First, emission standards for U.S. and Mexican heavy-duty Diesel engines have only been equivalent from the 1993 model-year to present and will diverge again with the 2004 model-year (and, in actuality, sooner based on settlement agreements between engine manufacturers and the U.S. EPA.).

For Mexican domiciled trucks with pre-1993 model-year heavy-duty Diesel engines not certified by the U.S. EPA and originally sold in the United States, it will be very difficult to demonstrate emissions equivalency with comparable U.S. vehicles. Prior to the 1993 model-year, emissions from new heavy-duty Diesel engines were not regulated in Mexico and, as indicated in Table 2 of our recent study,^{*} we believe that engines used in Mexican trucks were not equivalent to engines used in U.S. trucks of the same model-year in terms of emission levels.

In summary, the demonstration of emissions equivalency is a complicated issue of considerable importance that should have been evaluated in the EA but was not.

The second issue of concern is what impact on overall emissions there might be if some or many of the heavy-duty truck engines and/or complete vehicles used in Mexico are made in the U.S. and then sold for installation on trucks sold and used in Mexico.

It is important to note that, at present, engines installed in Mexican trucks do not appear to be subject to two sets of more stringent emission standards that apply to U.S. trucks beginning with the 2004 and 2007 model-years. At present, Diesel engines sold in the U.S. and Mexico can, in many cases, comply with applicable emission regulations without the use of components whose sole purpose is to reduce emissions.

In order to comply with the 2004 model-year U.S. engine standards, manufacturers will, in general, be required to incorporate exhaust gas recirculation (EGR) systems into their engines. EGR systems typically involve passage ways and valves (either internal or external to the engine itself) for returning exhaust gases from the exhaust manifold to the intake manifold and as a system that allows the amount of exhaust gas that is returned, as well as the engine operating conditions under which gas is recirculated to be controlled. Addition of EGR systems will increase the cost of heavy-duty Diesel engines.

^{*}"Critical Review of 'Safety Oversight for Mexico-Domiciled Commercial Motor Carriers, Final Programmatic Environmental Assessment,' Prepared John A Volpe Transportation Systems Center, January 2002", Sierra Research Report No. SR02-04-01, April, 16, 2002.

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The primary purpose of EGR systems is to lower NOx emissions. Such systems provide no improvement in engine power, operability, durability, or fuel economy. In fact, the use of EGR systems on heavy-duty Diesel engines has raised considerable concern regarding decreased engine durability. Given that EGR systems will increase the cost of engines and potentially adversely affect engine durability without providing any benefits other than reduced NOx emissions, it is unlikely that manufacturers will incorporate EGR systems into engines sold in countries like Mexico if there are no regulations requiring the additional reductions in NOx emissions that the systems provide.

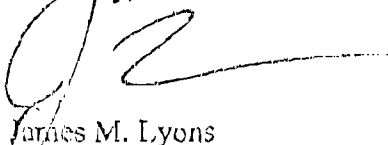
In order to comply with the 2007 model-year U.S. engine standards, manufacturers are required to design emissions after-treatment devices capable of achieving nominally 90% reductions in engine out levels of PM and NOx. It appears that catalytic particulate traps (larger filters that are placed in the exhaust system to trap particulate emissions that are then burned in some manner using catalytic techniques of different types) will be used to reduce PM emission levels to the degree necessary to comply with the standards. NOx reductions will be achieved with either selective catalytic reduction systems or lean-NOx adsorber catalysts. Again, these devices must also be added to the engines exhaust system. These after-treatment control systems will be designed for use only with Diesel fuels that contain a maximum of 15 parts per million (ppm) of sulfur.

The application of after treatment control devices to heavy-duty Diesel engines will increase the cost of Diesel engines by at least several thousand dollars and increase truck operating costs. The hardware devices provide no benefit (such as improved fuel economy, engine durability or increased power) other than reduced emissions. To the contrary, these devices will tend to reduce engine power because they increase exhaust back pressure. The use of Diesel fuels with sulfur levels in excess of 15 ppm will reduce the effectiveness of the after-treatment devices and may in some cases permanently damage them.

In our opinion, it is unlikely that these after treatment control devices will be included on engines sold in countries where they are not required to comply with the host country's emission standards or in countries where the maximum allowable limit on Diesel fuel sulfur content is greater than 15 ppm.

Thank you for including these comments in the docket.

Sincerely,



James M. Lyons
Senior Partner